

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~A material~~ Materials comprising groups containing sulfur ~~sulphur~~ and phosphorous bonded together by a hydrocarbon chain and bonded via phosphorous and oxygen atoms to a mineral oxide of one or more elements M, said materials ~~being~~ characterized in that they comprising comprise M-O-M' groups bonds, M' representing an element of a mineral oxide identical to or different from M, ~~in that~~ the ratio of said element M to the phosphorous being is about 0.5:1 to about 500:1, ~~and in that~~ each phosphorous atom of the phosphorous-containing groups forming forms at least one P-O-M group bond and/or P-O-M' group bond, said material being prepared by gel formation.

2. (Original) Materials according to claim 1, in which M and M' represent the same element.

3. (Original) Materials according to claim 1 or claim 2, in which M and M' represent an element from groups IB, IIB, IIIB, IVB, VB, VIB, VIIB, VIII, IIIA, IVA, the lanthanides or the actinides of the periodic table.

4. (Original) Materials according to any one of claims 1 to 3, in which M and M' are selected from elements from the group formed by titanium, zirconium, iron, aluminium, silicon and tin, and preferably selected from elements from the group formed by titanium, zirconium and aluminium.

5. (Currently Amended) Materials according to any one of claims 1 to 4, in which the organic ~~sulphur~~ sulfur-containing group is preferably selected from thiol groups and their derivatives or from acid sulfonic ~~sulphonie~~ groups and their derivatives.

6. (Currently Amended) A process for preparing a material according to any one of claims 1 to 4, in which at least one halogenated derivative with formula $M(\text{Hal})_z$ or at least one alkoxyated derivative with formula $M(\text{OR}')_z$, where z is equal to the ~~valence~~ valency of the element M , Hal is a halogen atom, R' is a hydrocarbon group, or at least one compound of element M selected from the group formed by carboxylates, sulfates ~~sulphates~~, nitrates, hydroxides and oxychlorides is brought into contact with at least one solution in a solvent of at least one phosphorous-containing compound with formula I where the sum $m+n+p+q$ is equal to 3, $m=0, 1$ or 2 , $q=0, 1$ or 2 , $x=0$ or 1 , $p=0, 1$ or 2 , R is a hydrocarbon group, X is a hydrocarbon group or a group with formula SiR''_3 where R'' is a hydrocarbon group, Z is a hydrocarbon group optionally comprising heteroatoms, Cat^+ is a monovalent cation and A is a ~~sulphur~~ sulfur-containing group or a reactive group that can be transformed into a ~~sulphur~~ sulfur-containing group.

7. (Currently Amended) A process according to claim 6, in which an alkoxyated derivative with formula $M(\text{OR}')_z$, where R' is an alkyl group containing 1 to 12 carbon atoms, preferably 1 to 6 carbon atoms, is brought into contact with a solution in a solvent of a phosphorous-containing compound with formula I where Cat^+ is a proton H^+ , R is an alkyl group containing 1 to 18 carbon atoms or an aryl group containing 6 to 18 carbon atoms or an alkyl-aryl group containing 7 to 24 carbon atoms, X is a group with formula SiR''_3 , where R'' is a hydrocarbon group, Z is a saturated or unsaturated bivalent alkyl group containing 1 to 18 carbon atoms or a bivalent aryl group containing 6 to 18 carbon atoms or a bivalent alkyl-aryl or aryl-alkyl group containing 7 to 24 carbon atoms and A is a ~~sulphur~~ sulfur-containing group selected from thiol groups and their derivatives and sulphonic acid groups and their derivatives.

8. (Original) A process according to claim 6 or claim 7, in which the phosphorous-containing compound with formula I is a compound in which $m=2$, $q=1$ and $n=p=\text{zero}$.

9. (Original) A process according to claim 6 or claim 7, in which the phosphorous-containing compound with formula I is a compound in which $n=2$, $q=1$ and $m=p=\text{zero}$.

10. (Original) A process according to any one of claims 6 to 9, in which the phosphorous-containing compound with formula I is a compound in which Z is a saturated bivalent alkyl compound containing 1 to 6 carbon atoms, preferably a polymethylene group.

11. (Original) A process according to any one of claims 6 to 10, in which the solvent for the phosphorous-containing compound is tetrahydrofuran, dimethylsulphoxide, dichloromethane or water.

12. (Currently Amended) Materials according to claim 1, in which M and M' represent an element from groups 1B, 2B, 3B, 4B, 5B, 6B, 7B, 8, 3A, 4A, IB, IIB, IIIB, IVB, VB, VIB, VIIB, VIII, IIIA, IVA, the lanthanides or the actinides of the periodic table.

13. (Currently Amended) Materials according to claim 1, in which M and M' are ~~selected from elements from the group consisting of~~ titanium, zirconium, iron, aluminium, silicon or and tin.

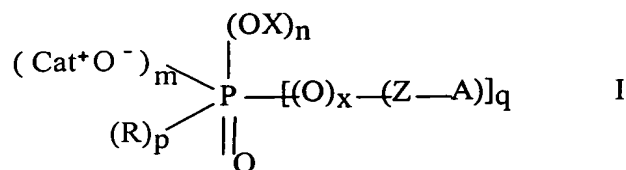
14. (Currently Amended) Materials according to claim 1, in which M and M' are ~~selected from elements from the group consisting of~~ titanium, zirconium, or and aluminium.

15. (Currently Amended) Materials according to claim 1, in which the ~~sulphur~~ sulfur-containing groups are ~~group is selected from~~ thiol groups[,] ~~and their derivatives thereof[,] or from acid sulphonie~~ sulfonic acid groups or and derivatives thereof.

16. (Currently Amended) Materials according to claim 14, in which the ~~sulphur~~ sulfur-containing groups are ~~group is selected from~~ thiol groups[,] ~~and their derivatives thereof[,] or from acid sulphonie~~ sulfonic acid groups or and their derivatives thereof.

17. (Currently Amended) A process for preparing a material according to claim 1,

in which at least one halogenated compound derivative of the formula $M(\text{Hal})_z$ or at least one alkoxyated compound derivative of the formula $M(\text{OR}')_z$, wherein z is equal to the valence valency of the element M , Hal is a halogen atom, R' is a hydrocarbon group, or at least one compound of element M which is a selected from the group consisting of carboxylate carboxylates, sulfate sulphates, nitrate nitrates, hydroxide or oxychloride, hydroxides and oxychlorides is brought into contact with at least one solvent solution of at least one phosphorous-containing compound of formula I



wherein the sum $m+n+p+q$ is equal to 3, $m=0, 1$ or 2 , $q=0, 1$ or 2 , $x=0$ or 1 , $p=0, 1$ or 2 , R is a hydrocarbon group, X is a hydrocarbon group or a group of the formula SiR''_3 where R'' is a hydrocarbon group, Z is a hydrocarbon group optionally comprising heteroatoms, Cat^+ is a monovalent cation and A is a ~~sulphur~~ sulfur-containing group or a reactive group that can be transformed into a ~~sulphur~~ sulfur-containing group.

18. (Currently Amended) A process according to claim 17, in which an alkoxyated compound derivative of the formula $M(\text{OR}')_z$, wherein R' is an alkyl group containing 1 to 12 carbon atoms, is brought into contact with a solution in a solvent of a phosphorous-containing compound of formula I wherein Cat^+ is a proton H^+ , R is an alkyl group containing 1 to 18 carbon atoms or an aryl group containing 6 to 18 carbon atoms or an alkyl-aryl group containing 7 to 24 carbon atoms, X is a group of the formula SiR''_3 , ~~wherein R'' is a hydrocarbon group~~, Z is a saturated or unsaturated bivalent alkyl group containing 1 to 18 carbon atoms or a bivalent aryl group containing 6 to 18 carbon atoms or a bivalent alkyl-aryl or aryl-alkyl group containing 7 to 24 carbon atoms and A is a ~~sulphur~~ sulfur-containing group which is a selected from thiol group, a groups and their derivatives derivative thereof, a and sulphonie sulfonic acid group or a derivative thereof

~~groups and their derivatives.~~

19. (Previously Presented) A process according to claim 17, in which the phosphorous-containing compound of formula I is a compound in which $m=2$, $q=1$ and $n=p=\text{zero}$.

20. (Previously Presented) A process according to claim 17, in which the phosphorous-containing compound of formula I is a compound in which $n=2$, $q=1$ and $m=p=\text{zero}$.

21. (Previously Presented) A process according to claim 17, in which the phosphorous-containing compound of formula I is a compound in which Z is a saturated bivalent alkyl compound containing 1 to 6 carbon atoms.

22. (Previously Presented) A process according to claim 17, in which the solvent for the phosphorous-containing compound of formula I, is tetrahydrofuran, dimethylsulfoxide ~~dimethylsulphoxide~~, dichloromethane or water.

23. (Previously Presented) A process according to claim 18, wherein R' is an alkyl group containing 1-6 carbon atoms.

24. (Previously Presented) A process according to claim 21, wherein Z is a polymethylene group.

25. (Previously Presented) A process according to claim 18, in which the phosphorous-containing compound of formula I is a compound in which $m=2$, $q=1$ and $n=p=\text{zero}$.

26. (Previously Presented) A process according to claim 18, in which the phosphorous-containing compound of formula I is a compound in which $n=2$, $q=1$ and $m=p=\text{zero}$.

27. (Previously Presented) Materials according to claim 2, wherein M and M'

represent Ti.

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| 17. | 28. | (Previously Presented) | Materials produced according to the process of claim |
| 18. | 29. | (Previously Presented) | Materials produced according to the process of claim |
| 19. | 30. | (Previously Presented) | Materials produced according to the process of claim |
| 20. | 31. | (Previously Presented) | Materials produced according to the process of claim |
| 21. | 32. | (Previously Presented) | Materials produced according to the process of claim |
| 22. | 33. | (Previously Presented) | Materials produced according to the process of claim |
| | 34. | (Previously Presented) | Materials according to claim 28, wherein M and M' represent Ti. |

Please add the following new claim:

--35. (New) Materials according to claim 1, wherein the ratio of element M to phosphorus is about 3.4:1 to 5.00:1.--